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POPULARIZING WATER¹

BY ROBERT E. McDONNELL²

The business of selling water, whether from private or municipally owned plants, with few exceptions is handled in a manner tending toward bankruptcy and failure rather than toward profits and success, due in a large measure to the failure of the water works officials to consider the public and conduct the water works with the apparent idea that the customers must have the water. Our almost universal practice of ignoring the public is a fault for which we are now paying the penalty.

Just now, at a time when prices for all water works materials and operating costs are mounting higher and higher and increased rates must be secured, the water works officials, whether private or municipal, are forced to turn to the public and conduct a campaign of publicity of water works facts and information before an unfriendly or hostile public opinion. The facts about water, its purity, the plant and its condition are now given out in a defensive attitude, and the lack of familiarity of the consumers with the plant and its needs shows the desirability of keeping before the public an educational campaign of popularizing the water, light, gas, or other utility. This campaign of publicity would have been easier had it been conducted constantly rather than spasmodically in time of stress.

A large proportion of public clamor against a utility is because the public is not posted as to the facts pertaining to the utility and its relation to the welfare of the citizens.

The knowledge and impressions of the public regarding the water works matters are in most cases gained at the water collector's window and through the monthly or quarterly bills mailed out. How many superintendents have ever compared the affability, courtesy, and patience displayed by the clerks selling water with that of the clerk selling dry goods. Can you imagine a clerk in a dry goods

¹ Read before the Iowa Section, November 5, 1920. Discussions are invited and should be sent to the Editor.

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store approaching a customer coatless and with a pipe in his mouth, yet at a water collector's window such a thing is not unusual.

Friends for a municipal water plant are just as important as for a private enterprise, for on the attitude of these friends depends the character of improvements. Appeals to the public for funds must be constantly made. Either new bond issues or tax levies are required in any growing community and the readiness with which the public responds to these appeals depends upon the friendly or unfriendly attitude toward the water works plant and its officials.

A water works official recently made the statement, "We must have new filters, we need new pumps, and we need new mains, but most of all we must have higher rates, but it will be a hard job to convince the public of these necessities because we have silently continued operating, hoping to avoid the necessity of laying our case before the voters."

To criticize without some remedy is easy, but to put into practical use the things helpful to popularize water is not as easy. In making these few humble suggestions the author frankly admits that many of his suggestions may not be new and water officials who are giving a perfect service to a satisfied public are probably already putting in practice many as good if not better ideas than he is able to suggest.

During twenty-five years of engineering in the water works business the author has become a consulting physician to sick water works plants, the first ten years service being largely that of an obstetrician in bringing into life new water works plants, and he must admit that before some of these lusty individuals or plants were of a voting age they had become careless in their ways and decay begun to appear. Many of them lost their nice new clean baby attire and soon needed apparel in keeping with their growth and importance in the community.

As they grew larger and reached out with mains in the residence district seeking friends, they passed by many prospective friends or customers, merely being too backward and modest to stop along the street long enough to make a connection, which is always essential to cement good relations.

In one particular individual or plant, a fourth of the people along the street were passed by with a scornful attitude of mind, saying, come to the office if you want to make my acquaintance. One water works individual of an Indiana city, who prides himself on

the popularity of his management, has discovered that on 100.9 miles of mains there are 2567 vacant lots, or 48 miles of his extensions front vacant property, all suitable for residences.

Every vacant lot passed is a direct loss, although it is a prospective customer whose acquaintance and connection are needed. Statistics show that for towns of the same population some water plants have as low as ten services per hundred people, while others as high as 27 services per 100 people. Out of a list of 31 cities in the S. W. Water Works Association territory, it is found that the connections per mile run from 13 to 87, with an average of 50 per mile. If a city shows less than this average, the superintendent should try to find the remedy and bring his record up to the average.

To revert back to the job of consulting physician to sick water plants, the growth of the plants like that of most young children is all to legs and arms until it becomes awkward, with nothing but extensions and no body, to supply their wants. In a few years the vital parts, such as supply, pumps, reservoirs, etc., are behind the extensions. Then comes a breaking down of the system and a rehabilitation is necessary, which is doubly hard because the public must be told how and why it happened and the sickness of the plant is often one that could be avoided by constantly watching its growth, acquainting the public with the symptoms of its illness, and giving a tonic in the prescription in the way of betterments before the patient goes to the hospital. This can best be accomplished by a complete program of future growth, showing what the plant will need in order to supply its growing condition. Let this program of growth go before the public in every possible way, so there will be no shocks or surprises. The rate of consumption from year to year, the rate of extension of mains, the pump capacity requirements, in fact every feature of the plant can be compared in graphical diagrams and curves showing the plant's needs. Supply them as news items on folders accompanying bills, as cartoons, and on the receipted cards, as for example, Omaha never lets the public forget the saving resulting in the municipal ownership and operation of that plant, for the same rate charge under private ownership is still printed on the cards, and in red ink is printed the reduction in cost of water under municipal ownership.

The most common ailment of water works plants is that produced by permitting impure water to go into the mains. Pure water is an asset that no city can afford to be without. If a city does not have

pure water it is without the essential qualifications of ever making the plant a success. After a pure water supply is established, the publicity regarding its purity should always be kept before the public. The United States Public Health Service has fixed a high standard and when a water plant meets their requirements and sells water for train service this fact should be made known. Photographic bacteria plates illustrating the difference between the raw water and purified water are always convincing and interesting to the public. Bottled waters are often sold where they are inferior to the quality sold from the water works plant. At Bay City, Michigan, recently the bottled water companies carried large display advertisements telling of the bacteria in the city water. At Tulsa it is reported that bottled water sales exceed the revenue from the municipal filter plant. By a campaign of publicity from a city or company having pure water there should not be a drop of bottled water sold.

Milk companies of many cities have recently inaugurated advertising campaigns to popularize milk, giving cartoons showing beautiful and healthful children, attributing everything to pure milk. Their statistics are convincing. The U. S. Department of Agriculture popularizes by cuts, drawings, pamphlets, and photographs before farmers, the need of pure seeds. Pure water has more good sound arguments as a basis for advertising and popularizing it than any other commodity.

The following percentages of increase in the water works materials and labor are derived from figures from more than 100 water works officials in 36 states: Cast iron pipe increase, 245 per cent; special castings increase, 191; lead increase, 88; meters ($\frac{3}{4}$ -inch) increase, 37; valves (6-inch) increase, 107; and coal increase, 98 per cent. Average increase in superintendents' salaries, 37 per cent. Average increase in other employees' salaries, 57 per cent.

The alarming feature of the investigation is that 79 per cent of the 100 cities have received no raise of rates, yet practically all of the cities are in urgent need of an increase. Of the 21 per cent of the cities securing a raise of rates, the average increase has been 49 per cent.

The one fact preventing a uniform raise of rates to meet the corresponding increase in other commodities is the lack of knowledge that the public possesses regarding the needs of the plant, its true condition, its value in dollars as a basis of rates and as an asset

to the community. These facts ought to be clearly set forth before the public and kept constantly before the public. If comparisons were made for use of the individual in the costs of all ordinary commodities it would be found that water, although the most essential of all commodities, is the lowest in cost.

If one compares his meat bill, bread bill, fuel bill, picture show bill, or cigar bill with his water bill he will find water the lowest of all.

Water needs popularizing both for the sake of our own health and happiness and for the future success of the water works business. We have now enlisted as a popularizer of water the great Commoner, W. J. Bryan, who recently said:

All hail to the drink of drinks—to water, the daily need of everything! It ascends from the earth in obedience to the summons of the sun, and descends in showers of blessings. It gives forth its sparkling beauty to the fragrant flowers; its alchemy transmutes base clay into golden grain; it is the radiant canvas upon which the finger of the Infinite traces the rainbow of promise. It is the beverage that refreshes and brings no sorrow with it. Jehovah looked upon it at Creation's dawn and said, "It is good."